Page 1

## Work Order ID 96264

January-21-13 2:47:18 PM

Quality Control

\*96264\*

Item ID: Revision ID:	D3219-1			Accept	*	1900	<b>040</b>	100	)* s	Setup S		*N:	S1*
Item Name: Start Date: Required Date: Reference:	Plate 1/21/13 1/28/13	<b>Start Qty:</b> 60.00 <b>Req'd Qty:</b> 60.00	*6 <i>n</i> * *6 <i>n</i> *			Cust Item I Customer:	D:		`	i	Stop	*N:	S2*
Approvals:		an: MC5	•				ate:	· · · · · · · · · · · · · · · · · · ·	R		Start Stop	*N! *N!	R1* R2*
Sequence ID/ Work Center II	)	Operation Description		Set Up/ Run Hours		Tool ID	Tool #	Plan Code	Accept Qty	Rejec Qty		Reject Number	Insp. Stamp
Draw Nbr	Re	vision Nbr							~'3	213			
D3219	Re	v A								,			
*100 *100*		FLOW WATER JET		0.00									7
Waterjet FLOW CNC Waterje	et "	Memo 1-Cut as per Dwg Rev: Prog Rev:	Dwg D3219	0.00					_216		_0_		<u>JM13</u> -2 · 11
110		QC2- Inspect parts off m	achine FAI/FAIB	0.00									
*110* QC Quality Control		Memo		0.00					216	·c	<b>)</b>		Jm. 3-2-11
120		QC8- Inspect parts - seco	and check	<sup>0.00</sup> Sin	<sup>U</sup> (>								
*120* QC		Memo		0.00 3.2	-11								

0.00 13.2-11

Memo

									DQA:	Date:	
NCR:	es / No				WORK ORDER NON-C	CONFO	RMANCE / UI	PDATE	OA Classali	D-1-	
									QA Closed:	Date	
Work Orde	ar.				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
WOIK OIG					Rework	1	Skid-tube	Crosstube	7	Water Jet	Engineering
Part N	No.				Scrap		Machining	Small Fab	Pro	d. Eng. Coor.	Quality
		<u> </u>			Use-as-is	The	rmoforming	Finishing	4	re/Packaging	Other
NCR 1	No				Work Order Update		Large Fab	Composite	]	Supplier	
Root		-		Descri	ption of work order update	Initial	Α	ction	Sign &		
Cause	Date	Step	Qty	(	or Non-conformance	Chief En	g Des	cription	Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator		1.									
Material		1									
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
					F	AULT CAT	EGORY				
Landi	ng Gear				General				_		<b></b>
	Bending		*		Bend	Grain	ı		Ovalized		Pressure/Forced
	Centre N	ot Concei	ntric to (	D/S	BOM/Route	Hard	vare		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged	Inspe	ction Incomplete		Part Incorre	ct	Weld
	Crushed/	Crimped.			Burrs	Instru	ctions Incomplete	e/Unclear	Part Lost/M	issing	Wrong Stock Pulled
	Cuffs				Contamination	Mair	tenance		Part Moved	-	
	Heat Trea	at		. [	Countersink	Misla	beled		Positioned \	Wrong	<b></b>
	Inspectio	n Strip in	Tube		Cut Too Short	Misre	ad		Power Loss/	/Surge	Other
	Ripples in	n Bend			Drill Holes	Offse	t				

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Page 2

January-21-13 2:47:18 PM Item ID: D3219-1 Accept \*N900040100\* Setup Start **Revision ID:** Item Name: Plate Start Date: 1/21/13 **Start Oty:** 60.00 **Cust Item ID:** Required Date: 1/28/13 Rea'd Oty: 60.00 **Customer:** Reference: Run Process Plan: Date: Approvals: Tooling: Date: Stop Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Reject Accept Insp. Work Center ID Description Run Hours Qty Code Number Otv Stamp 130 0.00 Small Fab \*130\* Small Fab 0.00 Memo Small Fab 1-Deburr if necessary. 140 QC5- Inspect part completeness to step on W/O 0.00 \*140\* 0.00 Memo Quality Control Identify as per dwg & Stock Location: 150 \*150\* Packaging 0.00 Memo Packaging \*\*\* STOCK IN STEP CELL\*\*\*

NCR: Y	es / No				WORK ORDER NON-O	CON	NFORM	MANCE / UPI	DATE			
										QA Closed:	Date	
Work Orde	er:				DISPOSITION		·		AGAINST DE	PARTMENT	PROCESS	
					Rework	]		Skid-tube	Crosstube		Water Jet	Engineering
Part N	lo				Scrap			Machining	Small Fab	<u>.</u> i	d. Eng. Coor.	Quality
NCR N	lo			***	Use-as-is Work Order Update			noforming Large Fab	Finishing Composite	Rec/Stor	e/Packaging Supplier	Other
Post		1	· · · · ·	Doccri	ption of work order update		nitial	Λ.σ.	tion	Sign &		T
Root Cause	Date	Step	Qty		or Non-conformance	1	ief Eng		ription	Date	Verification	QC Inspector
Doc/Data	Date	Step	Qty		or Non-comormance	-	ici Liig	Desci	праоп	Date	Verification	Qc mspector
Equip/Tooling												
Operator	-	ŀ										
Material	$\dashv$						:					
Setup , .	$\dashv$											
Other		ļ										
Process		į										
Supplier		ļ										
Training												
Unapproved				l		1.						
					F	AUL	T CATE	GORY				
Landi	ng Gear				General					_		_
į	Bending				Bend		Grain			Ovalized		Pressure/Forced
	Centre N	ot Conce	ntric to (	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged		Inspecti	ion Incomplete	<u></u>	Part Incorre	ct	Weld
	Crushed,	/Crimped			Burrs		Instruct	ions Incomplete/	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
Ì	Cuffs				Contamination		Mainte	enance		Part Moved		
	Heat Tre	at			Countersink		Mislabe	eled		Positioned V		<del></del> -
ļ	Inspection	on Strip in	Tube		Cut Too Short	-	Misread	t		Power Loss/	Surge	Other
	Ripples i	n Bend		L	Drill Holes		Offset					
	Torque V	Vaves in I	Extrusio	ո	Drawing		Out of 0	Calibration				

Out of Sequence

Outside Dimensions

Date: \_\_\_\_\_

DQA: \_\_\_\_\_

Turning Sequence

Wave/Twist in Tube

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

January-21-13 2:47:18 PM

Page 3

Item ID: D3219-1 Accept \*N900040100\* Setup Start Revision ID: Item Name: Plate Start Date: 1/21/13 **Start Oty:** 60.00 Cust Item ID: Required Date: 1/28/13 Req'd Qtv: 60.00 **Customer:** Reference: Run Start Approvals: Process Plan: \_\_\_\_ Date: \_\_\_ Date: Tooling: Stop Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Insp. Work Center ID Description **Run Hours** Number Stamp Code Qty Qty 160 QC21- Final Inspection - Work Order Release 0.00 \*160\* MLJ 13-62-11 MLJ 13-02-11 QC 0.00 Memo Quality Control

NCR: Y	es /	No			WORK ORDER NON-	COI	NFORN	AANCE / UPD	ATE	•			
W 10 100 110										QA Closed:	Dat	e:	
Work Orde	or.				DISPOSITION				AGAINST DE	PARTMENT	PROCESS		
Part N	Part No				Rework Scrap Use-as-is Work Order Update			Skid-tube Crosstube  Machining Small Fab  Thermoforming Finishing  Large Fab Composite			Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier		
							<u> </u>			<del>-</del>			
Root					ption of work order update	1	Initial	Actio		Sign &			
Cause	D	ate Step	Qty		or Non-conformance	Cr	nief Eng	Descri	ption	Date	Verification	n QC Inspector	
Doc/Data	_												
Equip/Tooling													
Operator							1						
Material	_												
Setup	_												
Other	_												
Process													
Supplier	-												
Training						1							
Unapproved						: 111	LT CATE	SOBA		<u></u>			
Landir	ng Gear				General	AUI	LI CAIL	30/11					
		ding			Bend	Г	Grain			Ovalized		Pressure/Forced	
	_	tre Not Conc	entric to O	)/5	BOM/Route	-	Hardwa	re		Over/Under	tolerance	Temperature/Cure	
1	Cra		chine to o	""	Broken/Damaged		-{	or: Incomplete	<u> </u>	Part Incorre		Weld	
}	_	shed/Crimpe	d	<del></del>	Burrs		4	ions Incomplete/U	nclear	Part Lost/Mi		Wrong Stock Pulled	
1	Cuf	•	<del>-</del> .	ļ	Contamination		Mainte		-	Part Moved			
	_	t Treat			Countersink		Mislabe		<u> </u>	Positioned V	Vrong		
1		ection Strip	in Tube	-	Cut Too Short		Misread		-	Power Loss/	_	Other	
		oles in Bend			Drill Holes		Offset		L		J -		
		que Waves ir	Extrusion		Drawing		-	Calibration					

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

## **Picklist Print**

January-21-13 2:47:22 PM

Work Order ID: 96264

Parent Item:

D3219-1

Parent Item Name: Plate

\*96264\*

\*D3219-1\*

**Start Date: 1/21/13** 

Required Date: 1/28/13

**Start Qty:** 60.00

Required Qty: 60.00

Comments:

IPP A04.04.19New issueKJ/JLM

ESR B 06.05.25 Waterjet EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.125		Purchased	No			100	sf	141.3162	0.0964	<del>9884</del> 21ء			
*M6061T6	S 125*								**	15		Jn	113-2-11

6061-T6 .125 Sheet

Location Loc Code Loc Oty MAT021 141.3161578 121473 0.9161578 123279 140.4

									DQA:	Date:	
NCR:	es / No				WORK ORDER NON-O	CONFORI	MANCE / UPI	DATE			
									QA Closed:	Date:	
Work Orde	ar:				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	-
WOIK OIGE			_		Rework	1 I	Skid-tube	Crosstube		Water Jet	Engineering
Part N	No.				Scrap		Machining	Small Fab	Pro	d. Eng. Coor.	Quality
		,			Use-as-is	Therr	noforming	Finishing	Rec/Sto	re/Packaging	Other
NCR N	10	·			Work Order Update	]	Large Fab	Composite		Supplier	
Root		T	ī	Dossri	ption of work order update	Initial	1 0	tion	Sign &		
	Data	Ston	Ott		or Non-conformance	Chief Eng			Date	Verification	QC Inspector
Cause	Date	Step	Qty	· ·	or Non-conformance	Chief Eng	Desci	ription	Date	verification	QC IIIspector
Doc/Data											
Equip/Tooling											
Operator					•						
Material		İ									
Setup Other	-										
Process	-										
Supplier									,		
Training				,							
Unapproved											
	<u> </u>	1	1		F	AULT CATE	GORY		1		
Landi	ng Gear				General						
	Bending				Bend	Grain			Ovalized		Pressure/Forced
	Centre No	ot Concei	ntric to	o/s	BOM/Route	Hardwa	are		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged	Inspect	ior Incomplete		Part Incorre	ct	Weld
	Crushed/	Crimped.			Burrs	Instruc	tions Incomplete/	Unclear	Part Lost/M	issing	Wrong Stock Pulled
	Cuffs				Contamination	Mainte	enance		Part Moved		-
	Heat Trea	at			Countersink	Mislab	eled		Positioned \	Vrong	

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LTD	Work Order:	96264
Description: Plate	Part Number:	D3219-1
Inspection Dwg: D3219 Rev: A		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

		_				
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.316	+0.005/-0.000	0.317			V	Thmor
2.293	+/-0.005	2.294"	_		V	
2.965	+/-0.010	2.970"	_		V	
0.566	+/-0.010	0.567			V	
0.375	+/-0.010	0.378	-		ν	
R0.125	+/-0.010	0.125	-		RG	
13.9°	+/-0.5°	13.90	1		RG Protrater	

Measured by: Thy	Audited by: Sm3	Prototype Approval:	N/A
Date: 13-2-11	Date: /3 2 //	Date:	N/A

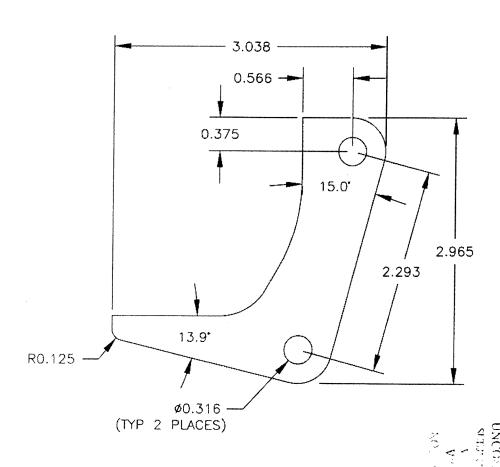
Rev	Date	Change -	Revised by	Approved
Α	04.04.19	New Issue	KJ/JLM	
В	07.09.06	13.9° dimension added	KJ/JLM ,	
С	08.04.15	0.125 dimension removed	KJ/DD 🔏	13/





DESIGI	W A	DRAWN BY	1	EROSPACE LTD BURY, ONTARIO, CANADA	
CHECK	ED	APPROVED,	DRAWING NO.		EV. A
DATE	71(	"η	TITLE	SHEET 1	OF 1
	0.10		PLATE		1:1
Α		03.10.10	NEW ISSUE		





## D3219-1 PLATE

- 1) MACHINE PER DWG FILE "D3219-1.SLDPRT"
- 2) MATERIAL: 6061-T6, 0.125 THICK (QQ-A-250/11)
  - (REF DART SPEC M6061T6S.125)
- 3) FINISH: NONE
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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